IN THE CLAIMS

1. (Currently amended) A manufacturing method of a semiconductor apparatus, comprising ~~the steps of~~:

forming a mask material film made of organic insulation film on a film to be processed;

forming a tapered aperture pattern, in which a bottom of said aperture pattern is made narrower than an open side of said aperture pattern on said mask material film; and

etching said film to be processed by using said mask material film as a mask.

2. (Original) The manufacturing method of a semiconductor apparatus according to claim 1, further including ~~the step of~~

removing said mask material film.

3. (Original) The manufacturing method of a semiconductor apparatus according to claim 1, wherein

said film to be processed has a step.

4. (Original) The semiconductor apparatus manufacturing method according to claim 1, wherein

said mask material film is made of material having a low dielectric constant.

5. (New) The semiconductor apparatus manufacturing method according to claim 1, wherein

said bottom of the aperture pattern can be formed at a desirable micro dimension exceeding capabilities of lithography techniques.

6. (New) A method of manufacturing a semiconductor apparatus comprising:

providing a film to be processed on a substrate;

providing a resist film on at least one dielectric mask material film, said dielectric mask material film being disposed on said film;

forming an aperture pattern on said resist film; and

using said resist film as a mask and etching said dielectric mask material film to form an open pattern, said open pattern being formed with tapered sides such that a bottom of said open pattern is narrower than an aperture side of said open pattern; and

etching said film.

7. (New) The method of manufacturing a semiconductor apparatus according to Claim 6 wherein said etching of said first mask material film to form an open pattern is carried out by setting a temperature of said substrate to minus 50 to 0 degrees Centigrade.

8 (New) The method of manufacturing a semiconductor apparatus according to Claim 6 wherein said dielectric film has a dielectric constant lower than silicon dioxide.

9 (New) A method of reducing a contact hole diameter in a semiconductor apparatus, comprising:

providing a resist film on at least one dielectric mask material film;

forming an aperture pattern on said resist film; and

using said resist film as a mask and etching said dielectric mask material film to form an open pattern, said open pattern being formed with tapered sides such that a bottom of said open pattern is narrower than an aperture side of said open pattern; and

vertically etching said film to obtain the contact hole with the reduced diameter.